

**Work Order ID 125157**

Tuesday, October 07, 2014 10:36:49 AM

**\*125157\***

Page 1

Item ID: D3413-1

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: O-Ring

Stop

**\*NS2\***

Start Date: 10/06/14 Start Qty: 12.00

**\*12\***

Cust Item ID:

Required Date: 10/06/14 Req'd Qty: 12.00

**\*12\***

Customer:

Reference:

Approvals: Process Plan: MLJDate: 14-10-08

Tooling:

Date:

Run Start

**\*NR1\***

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

**\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr	
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D3413	Rev A	
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100									
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**\*100\***

FLOW WATER JET

Waterjet

FLOW CNC Waterjet

304.250" x 4"

Memo

0.00

DAS

23

9-89

14-11-03

12 0

110

QC2- Inspect parts off machine FAI/FAIB

0.00

DAS

23

9-89

14-11-03

**\*110\***

Memo

0.00

QC

Quality Control

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only 

Work Order: _____	DISPOSITION			AGAINST DEPARTMENT/PROCESS				
Part No. _____	Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	
NCR No. _____	Suspected Unapproved <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Finishing <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>	
				Composite <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Supplier <input type="checkbox"/>	Other <input type="checkbox"/>	

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

## FAULT CATEGORY

Landing Gear	General			
Bending <input type="checkbox"/>	Bend <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>
Centre Not Concentric <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Set-up <input type="checkbox"/>
Cracks <input type="checkbox"/>	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>
Crimp/Kink/Ripple/Wave <input type="checkbox"/>	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Weld <input type="checkbox"/>
Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>
Crushing <input type="checkbox"/>	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>	
Heat Treat <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	
Inspection Strip in Tube <input type="checkbox"/>	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>		
Marks/Chatter <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>		
Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>		
Wave/Twist in Tube <input type="checkbox"/>	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>		

Work Order ID 125157

\*125157\*

Tuesday, October 07, 2014 10:36:49 AM

Page 2

Item ID: D3413-1

Accept

\*N900040100\*

Setup

Start

\*NS1\*

Revision ID:

Item Name: O-Ring

Stop

\*NS2\*

Start Date: 10/06/14 Start Qty: 12.00

\*12\*

Cust Item ID:

Required Date: 10/06/14 Req'd Qty: 12.00

\*12\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

120

QC8- Inspect parts - second check

\*120\*

QC

Quality Control

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

DAS

38

9-89

(12)

DEC 08 2014

150

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

\*150\*

Powdercoat

Powder Coating

Memo

0.00

START TIME:

11:25

OVEN TEMPERATURE:

FINISH TIME:

11:55

12/08/14-12-8 08:55

160

QC3- Inspect Part Finish

0.00

DAS

38

9-89

\*160\*

QC

Quality Control

Memo

0.00

(12)

DEC 08 2014

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date: \_\_\_\_\_

Work Order update only 

Work Order: \_\_\_\_\_  
 Part No. \_\_\_\_\_  
 NCR No. \_\_\_\_\_

## DISPOSITION

Rework  
Scrap  
Use-as-is  
Suspected Unapproved

## AGAINST DEPARTMENT/PROCESS

Skid-tube  
Machining  
Thermoforming  
Large Fab

Crosstube  
Small Fab  
Finishing  
Composite

Water Jet  
Prod. Eng. Coor.  
Rec/Store/Packaging  
Supplier

Engineering  
Quality  
Other

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

## FAULT CATEGORY

Landing Gear	General			
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Folio/Program	<input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Pressure/Forced
<input type="checkbox"/> Centre Not Concentric	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Grain	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Set-up
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damage/Defect	<input type="checkbox"/> Hardware	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Temperature/Cure
<input type="checkbox"/> Crimp/Kink/Ripple/Wave	<input type="checkbox"/> Burrs	<input type="checkbox"/> Inspection Incomplete/Unqualified	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Weld
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Moved	<input type="checkbox"/> Wrong Stock Pulled
<input type="checkbox"/> Crushing	<input type="checkbox"/> Countersink	<input type="checkbox"/> Misaligned/off center	<input type="checkbox"/> Positioned Wrong	<input type="checkbox"/> Other
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Power Loss/Surge	
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Drawing	<input type="checkbox"/> Misread		
<input type="checkbox"/> Marks/Chatter	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Off-set		
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Calibration		
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Fit/Function	<input type="checkbox"/> Out of Sequence		

**Work Order ID 125157**

Tuesday, October 07, 2014 10:36:49 AM

**\*125157\***

Page 3

Item ID: D3413-1

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: O-Ring

Stop

**\*NS2\***

Start Date: 10/06/14 Start Qty: 12.00

**\*12\***

Cust Item ID:

Required Date: 10/06/14 Req'd Qty: 12.00

**\*12\***

Customer:

Reference:

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	<b>*NR1*</b>
						Stop	
	QC:	Date:	SPC (Y/N):	Date:			<b>*NR2*</b>

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170	Identify as per dwg & Stock Location: <u>S1530</u>	0.00							
<b>*170*</b>									
Packaging	Memo	0.00							
Packaging									
180	QC21- Final Inspection - Work Order Release	0.00							
<b>*180*</b>									
QC	Memo	0.00							
Quality Control									

14/12/10NF  
14-12-9

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only 

Work Order: _____	<b>DISPOSITION</b>	<b>AGAINST DEPARTMENT/PROCESS</b>					
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>		
NCR No. _____	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>		
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>		
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>			

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

**FAULT CATEGORY**

Landing Gear	General			
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Folio/Program	<input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Pressure/Forced
<input type="checkbox"/> Centre Not Concentric	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Grain	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Set-up
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damage/Defect	<input type="checkbox"/> Hardware	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Temperature/Cure
<input type="checkbox"/> Crimp/Kink/Ripple/Wave	<input type="checkbox"/> Burrs	<input type="checkbox"/> Inspection Incomplete/Unqualified	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Weld
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Moved	<input type="checkbox"/> Wrong Stock Pulled
<input type="checkbox"/> Crushing	<input type="checkbox"/> Countersink	<input type="checkbox"/> Misaligned/off center	<input type="checkbox"/> Positioned Wrong	<input type="checkbox"/> Other
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Power Loss/Surge	
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Drawing	<input type="checkbox"/> Misread		
<input type="checkbox"/> Marks/Chatter	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Off-set		
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Calibration		
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Fit/Function	<input type="checkbox"/> Out of Sequence		

# Picklist Print

Tuesday, October 07, 2014 10:36:49 AM

Page 1

Work Order ID: 125157

\*125157\*

Parent Item: D3413-1

\*D3413-1\*

Parent Item Name: O-Ring

Start Date: 10/06/14

Required Date: 10/06/14

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP Rev:A05.09.13New issueKJ/JLM  
IPP Rev:B Now on Waterjet 07-05-28 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304B0.250X4.000  <b>*M304B0 250X4 000*</b> 304 BAR .250 x 4.00		Purchased	No			100	f	16.8400	0.25	4		DAS 23 9-89	
									**				14-11-03

Location	Loc Qty	Loc Code
MAT051	16.84	
123313	2.34	
M128247	5.5	
M129972	9	129972

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date: \_\_\_\_\_

Work Order update only 

Work Order: \_\_\_\_\_  
 Part No. \_\_\_\_\_  
 NCR No. \_\_\_\_\_

## DISPOSITION

Rework  
Scrap  
Use-as-is  
Suspected Unapproved

## AGAINST DEPARTMENT/PROCESS

Skid-tube  
Machining  
Thermoforming  
Large Fab

Crosstube  
Small Fab  
Finishing  
Composite

Water Jet  
Prod. Eng. Coor.  
Rec/Store/Packaging  
Supplier

Engineering  
Quality  
Other

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

## FAULT CATEGORY

Landing Gear	General			
Bending	Bend			
Centre Not Concentric	BOM/Route			
Cracks	Broken/Damage/Defect			
Crimp/Kink/Ripple/Wave	Burrs			
Cuffs	Contamination			
Crushing	Countersink			
Heat Treat	Cut Too Short			
Inspection Strip in Tube	Drawing			
Marks/Chatter	Drill Holes			
Turning Sequence	Finish			
Wave/Twist in Tube	Fit/Function			

DART AEROSPACE LTD	Work Order:	12515X
Description: Ring	Part Number:	D3413-1
Inspection Dwg: D3413	Rev: A	Page 1 of 1

## **FIRST ARTICLE INSPECTION CHECKLIST**

## X First Article      X Prototype

DAS

23

68-6

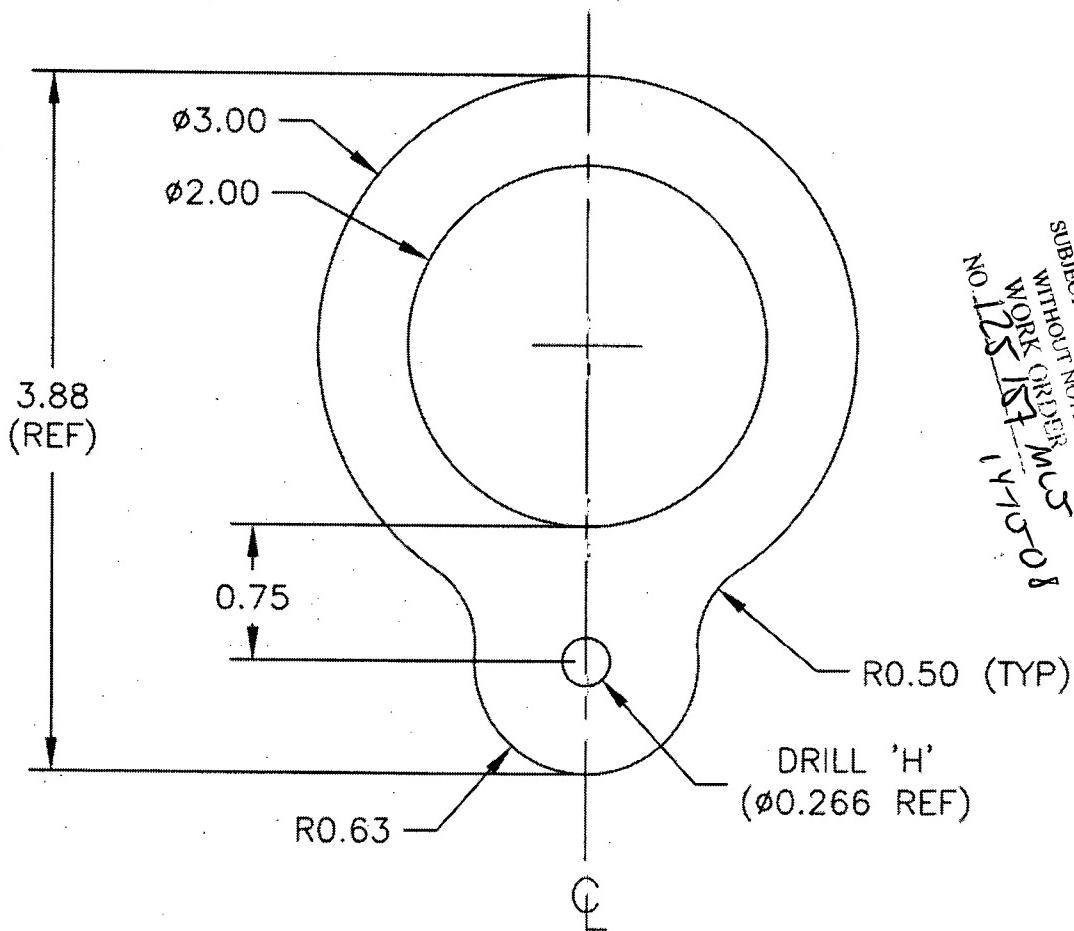
Measured by:	9-89	Audited by:	83 SCH	Prototype Approval:	N/A
Date:	14-11-03	Date:	DEC 0 R 2014	Date:	N/A

<b>Rev</b>	<b>Date</b>	<b>Change</b>	<b>Revised by</b>	<b>Approved</b>
A	07.09.06	New Issue	KJ/JLM	E



**DART**

DESIGN CP	DRAWN BY CP	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3413	REV. A SHEET 1 OF 1
DATE 05.03.16		TITLE RING	SCALE 1:1
A	05.03.16	NEW ISSUE	

**RELEASED**  
05-09-06 *[Signature]***D3413-1 RING**

- 1) MATERIAL: AISI 304/316 SS PLATE, 0.250 THICK (REF DART SPEC. M304S3GA)
- 2) FINISH: POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) DEBURR ALL SHARP EDGES 0.010 TO 0.020
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

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